REMARKS

In response to the Examiner's rejection of claims 32 and 35-40 for nonstatutory subject matter, Applicant is submitting an amendment referencing these claims to the operation of a medical fluid injector, thus clearly avoiding the issues raised by the Examiner. Applicant further notes that the Bilski decision cited by the Examiner will be considered by the Supreme Court, rendering the Federal Circuit opinion in that matter moot until such time as the Supreme Court rules.

With respect to prior art, the Examiner has entered a rejection of all claims based upon the combination of Koenig and Hochman. Koenig is relied upon for showing an "instrument configuration mode" which the Examiner interprets as a "service mode", in which various functions may be performed. The Examiner admits, however, that Koenig is silent as to including a function in the "instrument configuration mode" for receiving one or more syringe constants and then calculating an additional syringe constant based on the input constant(s). To fill this gap, the Examiner relies upon Hochman, which shows an injector pump that has a memory 160 storing data banks related to syringes. According to Hochman col. 8 lines 40 et seq. the data banks are "dedicated to the following information: (a) syringes; (b) tubing; (c) needles; (d) fluids; (e) governor parameters; and (f) profiles consisting of a plurality of parameters for a particular procedure to be performed." Although Hochman thus discuses that information about syringes is stored by an injector, there is no disclosure in Hochman that the injector has a mode for entering this information, in regular operation or a "service mode". Rather, Hochman describes in col. 9 that the standard operating mode of the injector includes selecting prestored syringe parameters from the data banks.

The crux of the Examiner's rejection is the assertion on page 4 that "[i]n storing the syringe characteristics in the data bank of Hochman, a user would have entered the values for syringe length, stroke length, and volume and then stored it as a particular definition capable of being accessed during the operational mode (col. 9, lines 23-41). Further, if syringe stroke length and volume are known, then the user would be capable of calculating an additional

syringe constant." This statement is pure supposition, as can be seen from the use of "would have" and "would be". In fact, there is nothing to suggest that the data in Hochman's data bank comes into being from user entry, as the Examiner supposes. Hochman specifically does not describe a process for entry of the syringe parameters into the data bank.

Thus, the prior art relied upon by the Examiner is two documents, neither of which disclose the entry of syringe parameters into an injector via a functionality of the injector, whether in a "service mode" or otherwise. This is, in fact, typical. As explained in the Background of the present application, paragraph 0007, "[i]n the past, accommodating syringe variations was often difficult, time-consuming and expensive. The firmware for controlling the injector typically includes definitions of permitted syringes. Thus, any changes to the physical parameters of a syringe required entirely new firmware such as EPROMS, orother non-volatile storage, to be created which then required service personnel to visit each site having an injector in order to replace the outdated EPROM."

Notably, the above explanation indicates that "firmware" typically contains the syringe parameters, and thus a new EPROM would be required to change parameters. The Examiner should not, therefore, assume that parameters in an injector must be there because a user typed them into a syringe interface. In fact, syringe parameters delivered via an EPROM are never typed in to the injector interface.

The Examiner appears to be relying upon the Koenig reference to suggest that it would be obvious to enter any parameters in service mode. However, this assertion flies in the face of what Koenig teaches, which is specifically not to enter syringe parameters via a service mode.

Furthermore, the Examiner's supposition of obviousness, flies in the face of the typical approach in which syringe parameters, if they are entered at all, are entered as part of normal use. This is also described in the background at paragraph 0008: "[s]ome injector systems require the operator to provide information about a syringe's physical characteristics as part of performing an operational routine with the injector system. This approach, however, does not address the

need for a service technician to be able to easily update syringe definitions stored within an injector system wherein such definitions can then be used during separate operational routines."

Applicant submits that the Examiner's obviousness rejection must fail, as the Examiner has not found an injector that allows for the entry of syringe parameters in a service mode, nor has the Examiner explain a departure from the known prior art to provide such a function.

In view of the above amendment and remarks, Applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 23-3000, under Order No. LF 231 from which the undersigned is authorized to draw.

Dated:

Respectfully submitted,

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